

PMOS EXHIBIT 4

EXECUTED INVENTION ASSIGNMENTS PLAINTIFF PROVIDED TO THE IDI

Attorney's Docket No.: 033393-067440-P
U.S. Provisional No. 61/325,003

ASSIGNMENT

WHEREAS, I, **Luigi Warren**, a citizen of United Kingdom, residing at 170 Brookline Avenue #612, Boston, MA 02215; have invented certain new and useful improvements in **SUSTAINED POLYPEPTIDE EXPRESSION FROM MODIFIED RNAS AND USES THEREOF**, which can be found in **U.S. Provisional Application No. 61/325,003**, filed **April 16, 2010**, and naming myself as inventor;

AND WHEREAS, **Immune Disease Institute, Inc.**, a Massachusetts corporation, with its principal place of business at CLSB 3rd Floor, 3 Blackfan Circle, Boston, MA 02115, desires to acquire the entire right, title and interest in and to the said improvements and the said Application:

NOW, THEREFORE, for good and valuable consideration, including salary or payment for the making of inventions, or employee benefits, the receipt of which is hereby acknowledged, I, the said inventor, do hereby acknowledge that I have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, unto the said **Immune Disease Institute, Inc.**, its successors, legal representatives and assigns, the entire right, title and interest throughout the world in, to and under the said improvements, and the said application and all divisions, renewals and continuations thereof, and all Letters Patent of the United States which may be granted thereon and all reissues and extensions thereof, and all rights of priority under International Conventions and applications for Letters Patent which may hereafter be filed for said improvements in any country or countries foreign to the United States, and all Letters Patent which may be granted for said improvements in any country or countries foreign to the United States and all extensions, renewals and reissues thereof; and I hereby authorize and request the Commissioner of Patents of the United States, and any Official of any country or countries foreign to the United States, whose duty it is to issue Patents on applications as aforesaid, to issue all Letters Patent for said improvements to the said **Immune Disease Institute, Inc.**, its successors, legal representatives and assigns, in accordance with the terms of this instrument.

AND I HEREBY covenant and agree that I will communicate to the said **Immune Disease Institute, Inc.**, its successors, legal representatives and assigns, any facts known to me respecting said improvements and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing and reissue applications, make all rightful oaths and generally do everything possible to aid the said **Immune Disease Institute, Inc.**, its successors, legal representatives and assigns, to obtain and enforce proper patent protection for said improvements in all countries.

Attorney's Docket No.: 033393-067440-P
U.S. Provisional No. 61/325,003

The undersigned hereby grant the law firm of Nixon Peabody LLP of 100 Summer Street, Boston, Massachusetts 02110-2131, U.S. the power to insert on this Assignment any further identification which may be necessary or desirable in order to comply with the rules of the U.S. Patent and Trademark Office for recordation of this document.

IN TESTIMONY WHEREOF, I, Luigi Warren, hereunto set my signature this 30 day of August, 2010.



Luigi Warren

Attorney's Docket No.: 033393-067443-US1; 033393-067442-PCT
U.S. Application Serial No.: 13/088,009
International Application No.: PCT/US11/32679

ASSIGNMENT

WHEREAS, I, **Luigi Warren**, a citizen of United Kingdom, residing at 157 Sixth Street, #605, Cambridge, MA 02142; have invented certain new and useful improvements in **SUSTAINED POLYPEPTIDE EXPRESSION FROM SYNTHETIC, MODIFIED RNAS AND USES THEREOF**, which can be found in U.S. Application Serial No. 13/088,009, filed April 15, 2011, and International Application No.: PCT/US11/32679, filed April 15, 2011, and naming me as inventor;

AND WHEREAS, **Immune Disease Institute, Inc.**, a Massachusetts corporation, with its principal place of business at CLSB 3rd Floor, 3 Blackfan Circle, Boston, MA 02115, desires to acquire the entire right, title and interest in and to the said improvements and the said Application:

NOW, THEREFORE, for good and valuable consideration, including salary or payment for the making of inventions, or employee benefits, the receipt of which is hereby acknowledged, I, the said inventor, do hereby acknowledge that I have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, unto the said **Immune Disease Institute, Inc.**, its successors, legal representatives and assigns, the entire right, title and interest throughout the world in, to and under the said improvements, and the said application and all divisions, renewals and continuations thereof, and all Letters Patent of the United States which may be granted thereon and all reissues and extensions thereof, and all rights of priority under International Conventions and applications for Letters Patent which may hereafter be filed for said improvements in any country or countries foreign to the United States, and all Letters Patent which may be granted for said improvements in any country or countries foreign to the United States and all extensions, renewals and reissues thereof; and I hereby authorize and request the Commissioner of Patents of the United States, and any Official of any country or countries foreign to the United States, whose duty it is to issue Patents on applications as aforesaid, to issue all Letters Patent for said improvements to the said **Immune Disease Institute, Inc.**, its successors, legal representatives and assigns, in accordance with the terms of this instrument.

AND I HEREBY covenant and agree that I will communicate to the said **Immune Disease Institute, Inc.**, its successors, legal representatives and assigns, any facts known to me respecting said improvements and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing and reissue applications, make all rightful oaths and generally do everything possible to aid the said **Immune Disease Institute, Inc.**, its successors, legal representatives and assigns, to obtain and enforce proper patent protection for said improvements in all countries.

Attorney's Docket No.: 033393-067443-US1; 033393-067442-PCT
U.S. Application Serial No.: 13/088,009
International Application No.: PCT/US11/32679

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IN WITNESS WHEREOF, I, Luigi Warren, hereunto set my signature this 25 day of APRIL, 2011.


Luigi Warren


Witness Signature

4/25/11
Date

Margaret McDonough
Witness Name (printed)

Attorney's Docket No.: 033393-067441-P
U.S. Provisional No.: 61/387,220

ASSIGNMENT

WHEREAS, I, **Luigi Warren**, a citizen of United Kingdom, residing at 170 Brookline Avenue #612, Boston, MA 02215; have invented certain new and useful improvements in **SUSTAINED POLYPEPTIDE EXPRESSION FROM SYNTHETIC, MODIFIED RNAS AND USES THEREOF**, which can be found in **U.S. Provisional Application No. 61/387,220**, filed **September 28, 2010**, and naming me as inventor;

AND WHEREAS, **Immune Disease Institute, Inc.**, a Massachusetts corporation, with its principal place of business at CLSB 3rd Floor, 3 Blackfan Circle, Boston, MA 02115, desires to acquire the entire right, title and interest in and to the said improvements and the said Application:

NOW, THEREFORE, for good and valuable consideration, including salary or payment for the making of inventions, or employee benefits, the receipt of which is hereby acknowledged, I, the said inventor, do hereby acknowledge that I have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, unto the said **Immune Disease Institute, Inc.**, its successors, legal representatives and assigns, the entire right, title and interest throughout the world in, to and under the said improvements, and the said application and all divisions, renewals and continuations thereof, and all Letters Patent of the United States which may be granted thereon and all reissues and extensions thereof, and all rights of priority under International Conventions and applications for Letters Patent which may hereafter be filed for said improvements in any country or countries foreign to the United States, and all Letters Patent which may be granted for said improvements in any country or countries foreign to the United States and all extensions, renewals and reissues thereof; and I hereby authorize and request the Commissioner of Patents of the United States, and any Official of any country or countries foreign to the United States, whose duty it is to issue Patents on applications as aforesaid, to issue all Letters Patent for said improvements to the said **Immune Disease Institute, Inc.**, its successors, legal representatives and assigns, in accordance with the terms of this instrument.

AND I HEREBY covenant and agree that I will communicate to the said **Immune Disease Institute, Inc.**, its successors, legal representatives and assigns, any facts known to me respecting said improvements and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing and reissue applications, make all rightful oaths and generally do everything possible to aid the said **Immune Disease Institute, Inc.**, its successors, legal representatives and assigns, to obtain and enforce proper patent protection for said improvements in all countries.

Attorney's Docket No.: 033393-067441-P
U.S. Provisional No.: 61/387,220

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IN WITNESS WHEREOF, I, Luigi Warren, hereunto set my signature this 27 day of April, 2011.


Luigi Warren


Witness Signature

4/27/11
Date

Pedro J. Barrene
Witness Name (printed)